

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-137 -EA

CASEFILE/PROJECT NUMBER: COD-035705

PROJECT NAME: Five Applications for Permit to Drill for Piceance Creek Unit T62X-11G1, G2, G3, G4, & G5

LEGAL DESCRIPTION: T2S., R97W., sec.11, SWNE (G1), NENE (G2), NWNE (G3), NWNE (G5), sec. 2, SWSE (G4), 6th P.M.

APPLICANT: ExxonMobil Oil Corporation

ISSUES AND CONCERNS: *All five wells would be located on the same well pad.*

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to perform the following actions: Construct a new access road approx. 185', reroute approx. 0.2 mi. (40' disturbance) of existing road around well pad with 18' running surface to maintain access (1.14 ac.), construct a well pad for 5 wells with dimensions of 440' x 430', with adjacent production facility pad 80' x 300' and associated cuts and fills for a total pad disturbance of approx. 4.9 ac. Drill wells PCU T62X-11G1, G2, G3, G4, G5, and install one buried 6" steel production and one buried 3" steel produced water pipeline for 3880' with 25' additional disturbance width paralleling an existing pipeline (2.23 ac.) to tie in with existing pipelines. Total new surface disturbance on BLM would be approx. 8.3 acres.

Road would be crowned, ditched, properly drained and surfaced in accordance with BLM standards prior to drilling operations. Corrugated metal pipe would be placed as needed. No cattleguards would be required. Gravel, if needed, will be bought from an existing commercial site. The turnoff from the public road would have adequate visibility.

No ancillary facilities would be constructed.

Water would either be piped with surface lines or trucked over access road. Remaining clear water would be pumped or hauled forward from previous wells after surface casing is set.

Drill cuttings would be disposed of in the reserve pit. Any drilling mud with greater than 1% diesel net weight would be hauled to a proper disposal site. An alternative to hauling would be solidification in the pit with method approved by the Colorado Oil and Gas Conservation Commission (COGCC). Trash, waste paper, and other garbage would be contained in a fenced trash cage and hauled to a commercial disposal site. Sewage from trailers on location and human wastes would be in self-contained chemical toilets or holding tanks and would be disposed of properly.

Drilling fluids would be allowed to evaporate in the reserve pit until the pit is dry enough for back filling. Water produced during tests would be disposed of in the reserve pit as per Onshore Order #7. Oil produced during tests would be stored in test tanks until sold, at which time it would be hauled from the site. In the event fluids in the pit do not evaporate in a reasonable time, the fluids would be hauled to a state approved disposal site or would be mechanically evaporated. The reserve pit would be fenced on three sides with 4 strand barbed wire during drilling and on the fourth side after the rig is released.

Mud pits in the active circulation system would be steel pits. The reserve pit may be lined with an impermeable liner if needed to hold fluid.

If snow is encountered, the snow would be removed before construction begins or the topsoil is disturbed, and placed downhill of the proposed topsoil stockpile. All available topsoil would be stripped on well locations and access roads, prior to construction, and stockpiled for use in reclamation of the site. Topsoil stockpile would be clearly segregated from any spoil pile and placed where it can be easily retrieved without impact to natural features.

Upon completion of the operation and disposal of trash and debris as prescribed above, pits would be backfilled and recontoured as soon as practical after they have dried.

Unneeded disturbed surfaces remaining after completion to the surface production facilities would be shaped to match the surrounding terrain and seeded as specified by the BLM.

When the well is abandoned, ExxonMobil would rehabilitate the road and location as per BLM specifications. Revegetation of the drill pad would comply with BLM specifications. Rehabilitation operations would start in a timely manner following the completion of operations, typically the following construction season. All areas of soil disturbance not necessary for production will be promptly revegetated.

Approximate date proposed action work would start is 07/20/05.

No Action Alternative: No permit would be approved, no well, access road, or pipeline would be constructed, and lessee would be denied lease rights. There would be no additional environmental consequences.

NEED FOR THE ACTION: To respond to request by applicant to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-5 thru 2-6

Decision Language: Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed actions are not located within a twenty mile radius of any special designation air sheds or non-attainment areas. Construction of well pad, pipe line and access road will have little effect on air quality in the area with exception to dry periods when gusty winds may temporarily increase fugitive dust levels. Overall, construction operations should not greatly compromise National Ambient Air Quality Standards (NAAQS) for particulate mater which calls for a maximum 24-hour average to be less than or equal to 150 µg/m³.

Environmental Consequences of the Proposed Action: Temporary reductions in vegetal cover resulting from construction activities will leave soils temporarily exposed to eolian processes. During dry and windy periods, air quality may be compromised due to increased levels of fugitive dust originating from the exposed construction area. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as provide documentation to the BLM that they have done so.

Revegetate surfaces disturbed during construction. Stockpiled soils must be covered and adequate ground cover must be applied (e.g. woody debris) to minimize surface exposure to eolian processes. Dust abatement (spreading water) will be required during dry periods.

CULTURAL RESOURCES

Affected Environment: The proposed well pad location has been inventoried at the Class III (100% pedestrian) level (Bott 2004, Compliance Dated 10/18/2004, Bott 2005, Compliance Dated 5/13/2005) with no cultural resources identified in the area inventoried.

Environmental Consequences of the Proposed Action: The proposed action will not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Noxious weeds known to occur in the project area include bull thistle, black henbane and common mullein. The invasive alien cheatgrass occurs throughout the area in areas of unvegetated soil disturbance associated with well locations, access roads and pipelines.

Environmental Consequences of the Proposed Action: The proposed action will create about 10 acres of earthen disturbance, which if it is not revegetated with desirable species and /or treated with herbicides to eradicate cheatgrass, will be invaded and dominated by cheatgrass, increasing the potential for fire and the consequent further proliferation of cheatgrass. The resulting proliferation of cheatgrass will perpetuate a downward cycle of environmental degradation that will be largely irreversible

Environmental Consequences of the No Action Alternative: there will be no change from the present situation.

Mitigation:

Promptly recontour and revegetate all disturbed areas with Native Seed mix # 2. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

MIGRATORY BIRDS

Affected Environment: There are a number of migratory birds that fulfill nesting functions in the big sagebrush and pinyon-juniper types traversed by this project during the months of May, June, and July, including several species identified as having higher conservation interest by the Rocky Mountain Bird Observatory, Partners in Flight program (i.e., Brewer's sparrow, gray flycatcher, black-throated gray warbler, juniper titmouse). Because the project area is composed of sagebrush communities encroached with pinyon-juniper regeneration (i.e., pipeline corridor), open-canopied submature woodland forms, and incorporates a number of existing road and pipeline features; neither sagebrush nor pinyon-juniper associates attain strong abundance or full representation.

Although this high plateau area has no open water or wetland areas that support or attract waterfowl use, the development of reserve pits that contain drilling fluids have attracted waterfowl use, at least during the migratory period (i.e., local records: mid-March through late May; mid-October through late November) and likely have similar attraction for migratory and resident passerines.

Environmental Consequences of the Proposed Action: Although road upgrading and pad construction would directly affect about 7 acres of woodland habitat, the pad incorporates and lies entirely within 200' of the existing road and two existing utility corridors to the north and south. The proposed pipeline route generally parallels reclaimed pipeline corridors of herbaceous character and would increase corridor width by 25 feet (involving 2 additional acres of shrub and woodland). These earlier seral woodland and later seral sagebrush habitats in close

proximity to existing roads and utility corridors tend to support low breeding bird densities and do not represent favorable nesting habitat for woodland raptors. Construction and drilling associated with this well is scheduled to commence in mid to late July 2005 and continue for many months. This period is generally asynchronous with the migratory bird nesting season and it is unlikely that more than 2-3 late renesting efforts would be affected under the proposed action.

It has recently been brought to this Field Office's attention that migratory waterfowl have contacted drilling or frac fluids stored in reserve pits during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with frac and drilling fluids that may pose a problem.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds or result in direct bird mortality.

Mitigation: It will be the responsibility of the operator to effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have potential to compromise the water-repellent properties of birds' plumage. Exclusion methods may include netting, the use of "bird-balls", or other alternative methods that effectively eliminate migratory bird contact with pit contents and meet BLM's approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to eliminate migratory bird use two weeks prior to initiation of drilling activities. The BLM-approved method will be applied within 24 hours after drilling activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to a White River Field Office Petroleum Engineer Technician immediately

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed, proposed, or candidate to the Endangered Species Act, nor animals considered sensitive by the BLM, that are known to inhabit or derive important benefit from the areas potentially influenced by the proposed action.

Environmental Consequences of the Proposed Action: Pad and road construction and drilling/completion operations would have no conceivable influence on special status species or associated habitat.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence special status species or associated habitats.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives would have no influence on populations or habitats of animals associated with the Endangered Species Act or BLM sensitive species and, as such, would have no influence on the status of applicable land health standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action is located within Hannahan Gulch, McCarthy Gulch, Dudley Gulch, and Dudley Gulch North catchment areas all are tributaries to Piceance Creek (tributary to the White River) and are in stream segment 16 of the White River Basin. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. The State has classified stream segment 16 of the White River Basin as "Use Protected" and further designated as beneficial for the following uses: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli.

Ground Water: The proposed action sits in a local ground water recharge area. In addition, deeper aquifers will be encountered during the drilling process.

Environmental Consequences of the Proposed Action: Construction of the access road, pipeline and well pad will result in temporary exposure of soils to erosional processes. Heavy equipment used during construction combined with the removal of ground cover will increase erosive potential due to runoff (overland flows) and raindrop impact during storm events.

Local ground water may be contaminated if a spill results or pit contents are allowed to infiltrate soils. Adverse impacts on deeper ground water are possible as a result of cross aquifer contamination due to drilling.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal water quality regulations as well as provide documentation to the BLM that they have done so.

To mitigate surface erosion due to removal of ground cover at the well pad, stockpiled soils must be covered and silt fences will be used on down gradient sides. Also, upon reclamation flow deflectors and sediment traps (woody debris) will be redistributed over the area along with Native Seed Mix #2. Also, in constructing the access road, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion.

To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, all pits must be lined and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

Finding on the Public Land Health Standard for water quality: Water quality in stream segment 16 currently meets standards set by the state. The proposed action may result in increased run-off which would elevate sediment loads in down stream reaches. Spills or leaks of contaminants would reduce water quality downstream compromising macroinvertebrates, vertebrates, and algae populations. However, if proper mitigation/reclamation procedures are closely followed, water quality in segment 16 should not be greatly compromised.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The closest channel system supporting riparian vegetation is Piceance Creek, which is separated by 2 to 4 miles of ephemeral channel from the proposed action (Dudley and Hatch Gulch). This portion of Piceance Creek (and about 7 miles downstream) is private and State-owned and stream function and morphology is heavily modified by irrigation practices (e.g., not strongly represented by obligate forms of riparian vegetation, moderately entrenched/undersized floodplains).

Environmental Consequences of the Proposed Action: This pad is situated on the edge of a relatively broad ridge separated from the nearest riparian system by at least 2 miles of ephemeral channel. Pad, pipeline, and road construction would have no direct impact on riparian/wetland resources. With the application of BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the Piceance Creek channel or its associated riparian resources.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream riparian communities.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: Downstream portions of Piceance Creek are private with the nearest BLM-administered reach about 7 miles downstream. These private portions of the creek are stable, but due to the factors listed above, their functional status is generally at-risk. Neither the proposed or no-action alternative would have any effective influence on the function or condition of the Piceance Creek channel, its riparian expression, or its land health status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The proposed actions will not encounter any fragile soils. The following data is a product of an order III soil survey conducted by the NRCS. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
33	Forelle loam	3-8%	Rolling Loam	<2	Medium	Moderate	>60
70	Redcreek-Rentsac complex	5-30%	PJ woodlands /PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20

33-Forelle loam (3 to 8 percent slopes) is a deep, well drained soil is on terraces and uplands. It formed in eolian and alluvial material derived dominantly from sedimentary rock. Areas are irregular in shape and are 20 to 600 acres in size. The native vegetation is mainly low shrubs and grasses.

Typically, the surface layer is pale brown loam 4 inches thick. The upper 12 inches of the subsoil is yellowish brown clay loam, and the lower 5 inches is light yellowish brown loam. The substratum to a depth of 60 inches or more is very pale brown loam.

Included in this unit are small areas of Patent loam, Piceance fine sandy loam, Work loam, Yamac loam, and Zoltay clay loam. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

Permeability of this Forelle soil is moderate. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is moderate.

The potential plant community on this unit is mainly western wheatgrass, prairie junegrass, big sagebrush, Douglas rabbit brush, stream bank wheatgrass, and needle and thread. The production of forage is limited by a short growing season and low precipitation.

If this unit is used for urban development, the main limitations are low soil strength, the potential for shrinking and swelling, and the hazard of frost action. The possibility of settlement can be minimized by compacting the building site before construction is begun. If buildings are constructed on this unit, properly designing foundations and footings and diverting runoff away from buildings help to prevent structural damage because of shrinking and swelling. Access roads should be designed to provide adequate cut-slope grade, and drains are needed to control surface runoff and keep soil losses to a minimum.

70-Redcreek-Rentsac complex (5 to 30 percent slopes) can be found on mountainsides and ridges. Areas are elongated and are 40 to 300 acres. The native vegetation is mainly pinyon and juniper trees with an understory of shrubs and grasses.

This unit is 60 percent Redcreek sandy loam and 30 percent Rentsac channery loam. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

Included in this unit are small areas of Forelle loam, Piceance fine sandy loam, and Yamac loam. Also included are small areas of Rock outcrop and soils that are similar to these Redcreek and Rentsac soils but are 20 to 40 inches deep to bedrock. Included areas make up about 10 percent of the total acreage. The percentage varies from one area to another.

The Redcreek soil is shallow and well drained. It formed in residual and eolian material derived dominantly from sandstone. Typically, the surface layer is brown sandy loam about 4 inches thick. The next layer is brown, calcareous sandy loam about 7 inches thick. The underlying material is very pale brown, calcareous channery loam 5 inches thick. Hard sandstone is at a depth of 16 inches. Depth to hard sandstone or hard shale ranges from 10 to 20 inches.

Permeability of the Redcreek soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high.

The Rentsac soil is shallow and well drained. It formed in residuum derived dominantly from sandstone. Typically, the upper part of the surface layer is grayish brown channery loam about 5 inches thick. The next layer is brown very channery loam about 4 inches thick. The underlying material is very pale brown extremely flaggy loam 7 inches thick. Hard sandstone is at a depth of 16 inches. Depth to hard sandstone or hard shale ranges from 10 to 20 inches.

Permeability of the Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high.

The potential plant community on this unit is mainly pinyon and juniper with an understory of beardless wheatgrass, Indian rice grass, serviceberry, mountain mahogany, sedges, and big sagebrush.

73-Rentsac channery loam (5 to 50 percent slopes) is a shallow, well drained soil found on ridges, foothills, and side slopes. It formed in residuum derived dominantly from calcareous sandstone. Areas are elongated and are 200 to 5,000 acres. The native vegetation is mainly pinyon, juniper, brush, and grasses.

Typically, the surface layer is grayish brown channery loam about 5 inches thick. The next layer is very channery loam about 4 inches thick. The underlying material is extremely flaggy light loam 7 inches thick. Hard sandstone is at a depth of 16 inches. Depth to sandstone ranges from 10 to 20 inches.

Included in this unit are small areas of Blazon channery loam, Forelle loam, Moyerson stony clay loam, Piceance loam, Redcreek fine sandy loam, and Yamac loam. Also included are small areas of soils that are similar to this Rentsac soil but are less than 10 inches deep and small areas of Rock outcrop. Included areas make up about 20 percent of the total acreage. The percentage varies from one area to another.

Permeability of this Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is moderate to very high.

The potential plant community on this unit is mainly pinyon and Utah juniper with an understory of Indian rice grass, beardless wheatgrass, mountain mahogany, and prairie junegrass. Smaller amounts of big sagebrush, bitterbrush, and serviceberry commonly are also present in the potential plant community.

Environmental Consequences of the Proposed Action: The well pad, access road and approximately 1/3 of the proposed pipeline are situated on Redcreek-Rentsac soils (soil #70). Redcreek-Rentsac soils are calcareous in nature and combined with their inability to hold water, dissolution of calcium carbonate and high potential for overland flows will lead to soil piping, head cutting and gully formation. Rentsac Channery loams (soil #73) also lack the ability to hold water increasing the potential for overland flows over those surfaces as well. Removal of limited ground cover will also expose soils to erosional processes. Heavy traffic will increase soil

compaction decreasing infiltration rates which in turn will also increase potential for erosive overland flows. Due to the low soil strength of the Forelle loam (soil #33) and its shrink/swell potential, portions of the pipeline may experience structural damage if sufficient drainage structures are not functional.

Leaks or spills of environmentally unfriendly substances on or near the pad or from the pipeline will contaminate soils hindering revegetation efforts. Soils unable to support a healthy plant community will be less cohesive (due to lack of root structure) and more vulnerable to erosional processes.

Environmental Consequences of the No Action Alternative: None

Mitigation: Comply with “Gold Book” surface operating standards for constructing well pad, pipeline and access road. Revegetate all disturbed surfaces following construction with Native Seed Mix #2 as defined in the White River Resource Area RMP. Flow deflectors and sediment traps (woody debris) must also be utilized in attempts to mitigate erosive potential of overland flows. Stockpiled soils must be covered and silt fences will be situated down gradient

To mitigate contamination of soils and local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils.

Complete reclamation will follow abandonment of well pad. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with Native Seed Mix #2.

Finding on the Public Land Health Standard for upland soils: At the present time, soils in the vicinity of the proposed action exhibit infiltration and permeability rates that are appropriate to soil type, landform, climate, and geologic processes. The proposed actions will cause decreases in both infiltration and permeability rates due to soil compaction and loss of vegetal cover. However, with proper mitigation soil health should not be greatly compromised.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation at the area of the proposed project area consists of mid aged stands of Pinyon-juniper woodland interspersed with Wyoming big sagebrush parks. The non P-J woodland areas are primarily rolling loam range sites in a mid seral state.

Environmental Consequences of the Proposed Action: The principal impact to vegetation will be complete removal of vegetation on the well sites and the earthen disturbance associated with it. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from pad and access road construction.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all disturbed areas with Native Seed mix # 2. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

2	Western wheatgrass (Rosanna)	2	Deep Loam, Loamy 10"-14", Loamy Breaks, Loamy Slopes, Rolling Loam, Valley Bench
	Indian ricegrass Rimrock)	1	
	Bluebunch wheatgrass	2	
	(Whitmar)	2	
	Thickspike wheatgrass	1	
	(Critana)		
	Needle and thread	1	
	Globemallow	0.5	

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Most of the public land plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation, the proposed action would not change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: Piceance Creek separated by 2 (pipeline) to 4 (pad and access) miles of ephemeral channel from the proposed action, supports the nearest aquatic habitat. The nearest BLM-administered reach is about 7 miles downstream of this point. Stream function and morphology on these downstream reaches are heavily modified by summer-long irrigation practices, but the stream persists in supporting small populations of leopard frog, speckled dace, and flannelmouth sucker.

Environmental Consequences of the Proposed Action: This pad is situated on the edge of a relatively broad ridge separated from the nearest aquatic system by a minimum 2 miles of ephemeral channel. Pad and road construction would have no direct impact on aquatic habitats. With the application of BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the Piceance Creek channel or its associated aquatic values.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream aquatic habitat.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Downstream portions of Piceance Creek are private with the nearest BLM-administered reach about 7 miles downstream. Neither the proposed or no-action

alternative would any effective influence on the function or condition of the Piceance Creek channel, its aquatic habitat values, or its land health status.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: This area is encompassed by deer severe winter range that is normally occupied during the late winter and early spring months. However, snow accumulations on these relatively level and higher elevation ridgeline positions typically limit deer use after January, with subsequent spring use typically involving April through mid-May.

Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action.

Environmental Consequences of the Proposed Action: The proposed action represents an incremental expansion of industrial development on Magnolia's deer severe winter range. Because this well involves no additional access and is situated in a developed field, the extent of avoidance-related effects (i.e., behavioral avoidance and habitat disuse; increased energetic demands) during the period of big game occupation would be relatively minor. Well development and completion would likely extend well into the winter use period and would normally be subject to a Condition of Approval that allows activity deferral for up to 60 days during the January through April severe winter period (i.e., a semblance of big game severe winter range stipulation TL-08). Because of prolonged development timeframes (i.e., drilling of 5 successive wells), this COA would be impractical to apply in this instance. Offsetting the effects of this proposed project on wildlife resources, including big game, this 5-well pad would substantially reduce the extent and distribution of forage and cover resources dedicated to access roads, pipelines, and pads associated with the alternate development of 5 separate well pads and reduces the cumulative effects of increasing road density and the expansion of industrial and recreational activity on these winter and spring ranges. The long-term occupation of about 7 acres of foraging area (pad and road) and temporary reductions in woody overstory on about 2 acres for the pipeline would have negligible influence on big game forage availability, with the herbaceous component ultimately offset by reclamation.

The proposed action would directly affect about 7 acres of open-canopied, predominantly submature woodland habitat. Particularly because the pad incorporates and lies entirely within 200' of the existing road and two existing utility corridors on the pad's north and south margins, and the proposed pipeline route generally parallels reclaimed pipeline corridors, it is unlikely that the project area represents favorable habitat conditions for woodland raptor nesting. Construction and drilling activities associated with this well (mid-late July 2005 through at least December) would occur outside raptor nesting timeframes and would have little, if any potential influence on nearby nest attempts.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to affect resident wildlife populations or associated habitat.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): On a landscape scale, the project area meets the public land health standards for terrestrial animal communities. The proposed action is considered an incremental addition to those lands dedicated to mineral development, but would not detract measurably from continued meeting of the land health standard at the landscape scale.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise	X		
Paleontology			X
Rangeland Management		X	
Realty Authorizations	X		
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The proposed action is located within an area where motorized travel is limited to existing routes.

Environmental Consequences of the Proposed Action: It is likely that the proposed location may exacerbate route proliferation.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

FIRE MANAGEMENT

Affected Environment: The T62X-11G pad proposed involves approximately 0.2 miles of road re-construction and about 5.7 acres of drill pad clearing, and 2.23 acres of pipeline row construction for an approximate total of 9.1 acres of disturbance. Due to the existing tree cover of pinion and juniper, there will be a need for the operator to clear some of these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-

site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Impact of Proposed Action: There will be approximately 9.1 acres of road, well pad, and pipeline construction requiring the removal of pinion/juniper fuel type on the T62X-11G well site. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, Exxon/contracting personnel, and fire suppression personnel.

Impact of No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project on the well pad and road re-route. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size and the mulch is evenly scattered across the surface. This would effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal. For the pipeline the trees should be dealt with according to forestry and wildlife stipulation. However, material brought back onto the pipeline should not exceed 5 tons/acre.

FOREST MANAGEMENT

Affected Environment: The well pad and approximately 1/3 of the pipeline are within a middle-aged pinyon/juniper woodland. This stand is considered commercial based on quality production and accessibility. Along the pipeline a fuel reduction project was completed in 2003 to decrease biomass for the goal of preventing large scale stand replacing fires. Within the White River Resource Management Plan a limit of 25 acres per year for clearcutting of

woodlands is permitted. These stands are also used by the local population as a source of firewood and fence posts, and are authorized under personal use permits.

Environmental Consequences of the Proposed Action: Under the proposed action 6.69 acres of woodland would be removed. The estimated volume of material removed is estimated at 67 cords. The removal of woodland resources is within that established within the land use plan (currently at 12 acres for 2005). Following reclamation pinions and junipers are expected to reoccupy the site and develop into a mature woodland. Establishment is expected to take up to 30 years and a mature woodland would develop in 250+ years. With the mitigation listed below there would not be problems with disease/insects or vehicle use along the pipeline.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: Trees associated with the well pad and access road will be chipped and spread. On the pipeline trees will be dozed off the right of way, and following seeding be pulled back onto the pipeline to prevent vehicle access.

GEOLOGY AND MINERALS

Affected Environment: Surface geology of the well pad location is Uinta and ExxonMobil's targeted zone is in the Mesaverde. During drilling water, oil shale, coal, oil and gas resources will be encountered. The pad is located on Federal oil and gas lease COD-035705.

Environmental Consequences of the Proposed Action: During drilling there is the potential for commingling of fresh water aquifers until the casing is cemented. Duration of the open hole will be relatively short and the amount of commingling limited. The proposed cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil between formations. Coal resource will be isolated; however they are at depths that would be too deep to be recovered by conventional methods. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

Environmental Consequences of the No Action Alternative: Maximum economic recovery of the oil and gas resources would not occur.

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed well pad location is in an area generally mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Condition I formation, meaning that it is known to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: If it becomes necessary to excavate into the underlying rock formation to level the road, level the well pad or excavate the reserve/bloolie pit there is the potential to impact scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. A paleontological monitor shall be present prior to and during any excavation into the underlying rock formation.

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO).

Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 10 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action is located in an area with a VRM III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would be located on an existing dirt road along the crest of a point that slopes away from the top of the ridge. The proposed action would not be visible from RBC 5, which would be the route traveled by a casual observer. The proposed action would be located in stands of pinyon/juniper. By painting all production facilities Juniper Green to blend with and mimic the surrounding vegetation, the level of change to the characteristic landscape would be low, and the standards of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: All above ground facilities shall be painted Juniper Green to blend with the surrounding environment.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED:

Bott, Tracy

- 2004 Exxon-Mobil Corporation: Class III Cultural Resource Inventory for the Proposed Independence Units T52X-29G and T51X-11G; Wells, Access, and Pipelines, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

2005 A Class III Cultural Resource Inventory for Exxon-Mobil's Piceance Creek Unit: Proposed T33X-29G2 and T6a2X-11G well Developments in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: none

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Range Conservationist	Invasive, Non-Native Species
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Mark Hafkenschiel	Range Conservationist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Range Conservationist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-137-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the APDs for wells # Piceance Creek Unit (PCU) T62X-11G1, G2, G3, G4, & G5, as proposed, for the well pad, access road and pipeline route with the mitigation listed below. The proposed action is in conformance with all applicable decisions in the White River RMP, and would not be expected to result in unnecessary or undue degradation of the public lands or resources.

MITIGATION MEASURES: 1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as provide documentation to the BLM that they have done so. Revegetate surfaces disturbed during construction. Stockpiled soils must be covered and adequate ground cover must be applied (e.g. woody debris) to minimize surface exposure to eolian processes. Dust abatement (spreading water) will be required during dry periods.

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. Promptly recontour and revegetate all disturbed areas with Native Seed mix # 2. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

4. It will be the responsibility of the operator to effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have potential to compromise the water-repellent properties of birds' plumage. Exclusion methods may include netting, the use of "bird-balls", or other alternative methods that effectively eliminate migratory bird contact with pit contents and meet BLM's approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to eliminate migratory bird use two weeks prior to initiation of drilling activities. The BLM-approved method will be applied within 24 hours after drilling activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to a White River Field Office Petroleum Engineer Technician immediately

5. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

6. The operator will be responsible for complying with all local, state, and federal water quality regulations as well as provide documentation to the BLM that they have done so. To mitigate surface erosion due to removal of ground cover at the well pad, stockpiled soils must be covered and silt fences will be used on down gradient sides. Also, upon reclamation flow deflectors and sediment traps (woody debris) will be redistributed over the area along with Native Seed Mix #2. Also, in constructing the access road, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion. To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, all pits must be lined and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

7. Comply with "Gold Book" surface operating standards for constructing well pad, pipeline and access road. Revegetate all disturbed surfaces following construction with Native Seed Mix #2 as defined in the White River Resource Area RMP. Flow deflectors and sediment traps (woody debris) must also be utilized in attempts to mitigate erosive potential of overland flows. Stockpiled soils must be covered and silt fences will be situated down gradient

To mitigate contamination of soils and local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils. Complete reclamation will follow abandonment of well pad. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with Native Seed Mix #2.

8. Promptly recontour and revegetate all disturbed areas with Native Seed mix # 2 in table below. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

SPECIES (VARIETY)	LBS. PLS/ACRE
Western wheatgrass (Rosanna)	2
Indian ricegrass (Nezpar)	1
Bluebunch wheatgrass (Whitmar)	2
Thickspike wheatgrass (Critana)	2
Green needlegrass (Lodorm)	1
Globemallow	0.5

Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into the soil. Use seed that is certified and free of noxious weeds. Seed certification tags must be submitted to the Field Office Manager within 30 days of seeding.

9. Several options may be considered for treatment of slash from this project on the well pad and road re-route. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size and the mulch is evenly scattered across the surface. This would effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal. For the pipeline the trees should be dealt with according to forestry and wildlife stipulation. However, material brought back onto the pipeline should not exceed 5 tons/acre.

10. Trees associated with the well pad and access road will be chipped and spread. On the pipeline trees will be dozed off the right of way, and following seeding be pulled back onto the pipeline to prevent vehicle access.

11. A paleontological monitor shall be present prior to and during any excavation into the underlying rock formation.

The operator is responsible for informing all persons who are associated with the project

operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

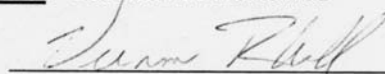
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12. All above ground facilities shall be painted Juniper Green to blend with the surrounding environment.

NAME OF PREPARER: Keith Whitaker

NAME OF ENVIRONMENTAL COORDINATOR: Caroline P. Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL:


Field Manager

DATE SIGNED:

6/29/05

ATTACHMENTS: Location map of the proposed action

Location of Proposed Action CO-110-2005-137-EA

